

**REMARKS**

After entry of this Amendment, Claims 1-15 will be all the claims pending in the application.

Claim 1 has been amended. Support for the amendment to Claim 1 may be found in the specification, e.g., at page 3, line 1.

No new matter has been added.

Entry of the above amendments is respectfully requested.

**Claim Rejections - 35 U.S.C. §§ 102, 103**

(A) On page 2 of the Office Action, Claims 1-3, 5-13, and 15 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as allegedly being obvious over Kasuga, *Formation of titanium oxide nanotube*, American Chemical Society (1998).

In response, and while not admitting that the rejection is appropriate, Claim 1 has been amended to recite a titania nanotube having a length of 10  $\mu\text{M}$  or more.

Applicants respectfully submit that the nanotube disclosed in Kasuga would have a length of at most 5 microns, based on the Response on page 3 of the Office Action. Accordingly, Applicants submit that present claim 1 is novel over Kasuga, and further, Claims 2-3, 5-13 and 15 are believed to be patentable by virtue of their dependency from present Claim 1.

Withdrawal of the rejection is respectfully requested.

(B) On page 3 of the Office Action, Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kasuga, *Formation of titanium oxide nanotube*, American Chemical Society (1998) in view of Grimes, *A sentinel sensor network for hydrogen*

*sensing*, Sensors (Published February 2003). Applicants respectfully traverse the rejection for the following reasons.

Initially, Applicants respectfully submit that Kasuga does not disclose a titania nanotube having a length of 10  $\mu\text{M}$  or more, as discussed above in section (A). Additionally, Applicants submit that Grimes does not disclose that the sensors have a length of 10  $\mu\text{M}$  or more.

Accordingly, Grimes does not make up for the deficiencies of Kasuga with respect to the length of the titania nanotubes recited in present Claim 1 and therefore a *prima facie* case of obviousness has not been established because the cited references do not teach or suggest each and every element of the claimed invention. That is, the references do not teach that the technical features of a titania nanotube used for the sensor include a length of the titania nanotube, and that the optimization of the length is well known in the art. Accordingly, Claims 4 and 14, which depend from present Claim 1, are non-obvious over the cited references.

Withdrawal of the rejection is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

  
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Joseph Hsiao  
Registration No. 51,822

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